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CLAIMS

A 2	1.	Α	method	for	а	subscriber	station	registration	in	а	broadcas
	communication system, comprising:										

receiving a HSBS channel modulating a first frequency; and

- 4 monitoring a timer status for the HSBS channel, and if the timer status is expired:
 - performing a broadcast service registration with a sector transmitting the HSBS channel;
 - setting status of the timer for the HSBS channel to enabled; and starting a timer for the HSBS channel.
- The method as claimed in claim 1 wherein performing a broadcast
 service registration with a sector transmitting the HSBS channel further comprises:
- 4 transmitting a paging identifier to the sector.
- 3. The method as claimed in claim 2 wherein transmitting a paging identifier2 to the sector further comprises;
- transmitting an identifier of the HSBS channel monitored by the 4 subscriber station to the sector.
- 4. The method as claimed in claim 2 wherein transmitting a paging identifier to the sector further comprises:
- transmitting an identifier of the frequency monitored by the subscriber station to the sector.
- 5. The method as claimed in claim 1, further comprising setting timer status to expired for all HSBS channels upon power up of the subscriber station.
- 6. A method for a subscriber station registration in a broadcast communication system, comprising:

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receiving a broadcast service registration from the subscriber station at a sector;

adding a paging identifier to the subscribers' station paging set; and starting a timer for the paging identifier.

- 7. The method as claimed in claim 6, further comprising:
- monitoring a timer status of all paging identifiers for all subscriber stations' paging sets, and if a timer status of a paging identifier for a subscriber station is expired, then removing the paging identifier from the subscriber's station paging set.
- 8. The method as claimed in claim 6, further comprising adding an identifier for the frequency that the subscriber station monitors upon power-up to the subscribers' station paging set
- 9. The method as claimed in claim 6 wherein adding a paging identifier to the subscribers' station paging set comprises:
 - adding an identifier of the HSBS channel monitored by the subscriber station to the subscribers' station paging set
- 10. The method as claimed in claim 6 wherein adding an identifier to the subscribers' station paging set comprises:
- adding an identifier of a frequency modulated by the HSBS channel monitored by the subscriber station to the subscribers' station paging set
- 11. A method for paging a subscriber station in a broadcast communication system, comprising:

determining a status of the subscriber station's paging set;

- determining paging channels on which to page the subscriber station in accordance with the determined status of the subscriber station's paging set;
- 6 and

paging the subscriber station on all determined paging channels.

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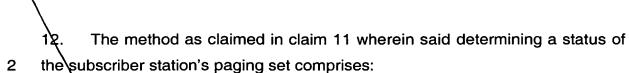
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set;



receiving at a subscriber station a HSBS channel modulating a first frequency;

monitoring at a subscriber station a timer status for the HSBS channel, and if the timer status is expired, then:

performing a broadcast service registration with a sector transmitting the HSBS channel;

setting status of the timer for the HSBS channel to enabled; and starting a first timer for the HSBS channel;

receiving at the sector the broadcast service registration from the subscriber station;

adding at the sector a paging identifier to the subscribers' station paging

starting at the sector a second timer for the paging identifier;

monitoring at the sector a timer status of all paging identifiers for all subscriber stations' paging sets, and if a timer status of a paging identifier for a subscriber station is expired, then removing the paging identifier from the subscriber's station paging set.

- 13. The method as claimed in claim 11 wherein said determining a paging channel on which to page the subscriber station in accordance with the determined status of the subscriber station's paging set comprises:
- determining frequencies on which to page the subscriber station in accordance with paging identifiers contained in the subscriber station paging set;
- determining paging channels on which to page the subscriber station for each of the frequencies; and

paging the subscriber station on all determined paging channels.

14. The method as claimed in claim 11 wherein said determining a status of2 the subscriber station's paging set comprises:

transmitting from the subscriber station a first notification of a desire to receive a broadcast channel;

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transmitting from the subscriber station a second notification a desire to cease broadcast channel reception;

adding a paging identifier to the subscriber station paging set upon receiving the first notification; and

emoving the paging identifier from the subscriber station paging set upon receiving the second notification.

- 15. The method as claimed in claim 14, further comprising:
- transmitting from the sector permission to receive the broadcast channel in response the first notification; and
- 4 receiving at the subscriber station the broadcast channel after receiving the permission
- 16. The method as claimed in claim 11 wherein said determining a status of the subscriber station's paging set comprises:
 - transmitting from the subscriber station a notification of a desire to receive a broadcast channel modulating a second frequency different from the first frequency monitored by the subscriber station;
- removing an identifier of the first frequency from the subscriber station paging set upon receiving the notification; and
 - adding an identifier of the first frequency to the subscriber station paging set upon receiving the first notification.
 - 17. The method as claimed in claim 16, further comprising:
- transmitting from the sector permission to receive the broadcast channel in response the first notification; and
- receiving at the subscriber station the broadcast channel after receiving the permission.
- 18. A method for paging a subscriber station in a broadcast communication 2 system, comprising:

modulating all frequencies of a sector with a broadcast channel;

determining paging channels on which to page the subscriber station for each of the frequencies; and





paging the subscriber station on all determined paging channels.

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19. A method for paging a subscriber station in a broadcast communication system, comprising:

determining a frequency that the subscriber station monitors upon power-

4 up;

determining all frequencies modulated by broadcast channels;

determining paging channels on which to page the subscriber station for each of the frequencies; and

paging the subscriber station on all determined paging channels.

20. A method for paging a subscriber station in a broadcast communication 2 system, comprising:

determining a frequency that the subscriber station monitors upon powerup, and if at least one broadcast channel is transmitted, then:

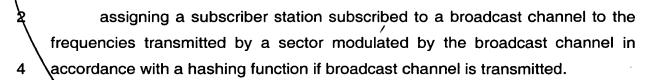
determining all frequencies modulated by the at least one broadcast channels to which the subscriber station is subscribed;

determining paging channels on which to page the subscriber station for each of the frequencies; and

paging the subscriber station on all determined paging channels.

- 21. The method as plaimed in claim 20, further comprising:
- determining paging channel on which to page the subscriber station for a frequency that the subscriber station monitors upon power-up; and
- paging the subscriber station on the determined paging channel if no broadcast channel is transmitted.
- 22. A method for assigning frequencies to a subscriber station upon powerup in a broadcast communication system, comprising:
- assigning a subscriber station to any of the frequencies transmitted by a sector in accordance with a hashing function if no broadcast channel is transmitted.
 - 23. The method as claimed in claim 22 further comprising:

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- 24. A method for providing broadcast parameters in a broadcast communication system, comprising:
- receiving at each subscriber station in an idle state a first channel 4 containing a message;

decoding at each subscriber station a header of the message; and decoding the remainder of the message only at the subscriber stations interested in a broadcast service.

- 25. The method as claimed in claim 24 wherein said receiving at each subscriber station in an idle state a first channel containing a message comprises:
- receiving at each subscriber station in an idle state a channel provided by a communication system for overhead messages.
 - 26. The method as claimed in claim 24 further comprising:
 receiving at each subscriber station interested in a broadcast service in a
 dedicated mode state a separate channel containing a message; and
- 4 decoding at the subscriber station the message.
- 27. The method as claimed in claim 26 wherein said receiving a first channel
 2 containing a message at each subscriber station in an idle state comprises:
 receiving at each subscriber station in an idle state a dedicated channel.
- 28. A method for providing broadcast parameters in a broadcast communication system, comprising:

transmitting from a sector a message in a first channel;

- receiving at each subscriber station in an idle state the first channel; decoding at each subscriber station a header of the message;
- decoding the remainder of the message only at the subscriber stations interested in,a broadcast service; and



- failing to receive the first channel at each subscriber station in a dedicated mode.
- 29. The method as claimed in claim 28, wherein said transmitting from a sector a message in a first channel comprises:

transmitting from the sector a channel provided by a communication system for overhead messages.

- 30. The method as claimed in claim 29, further comprising:
- transmitting from the sector a separate channel containing the message to each subscriber station interested in a broadcast service in a dedicated mode; and

decoding the message at each subscriber station interested in a 6 broadcast service in a dedicated mode.

- 31. The method as claimed in claim 30, wherein said transmitting from the sector a separate channel containing the message to each subscriber station interested in a broadcast service in a dedicated mode comprises:
- 4 transmitting from the sector a dedicated channel.